GOVERNMENT OF INDIA
OCEAN DEVELOPMENT
LOK SABHA

STARRED QUESTION NO:454
ANSWERED ON:23.12.2005
STUDIES ON COASTAL REGION
Bose Shri Subrata

Will the Minister of OCEAN DEVELOPMENT be pleased to state:

(a) whether a Coastal Monitoring and Prediction System (COMAPS) has been launched by the Government for conducting studies in the coastal regions of the country;

(b) if so, the details thereof;

(c) the details of funds allocated/expenses incurred on the COMAPS since its launching, year-wise;

(d) the important studies undertaken by COMAPS so far; and

(e) the benefits derived by studies carried out, if any? ` .

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE & TECHNOLOGY AND MINISTER OF STATE (INDEPENDENT CHARGE) OF THE DEPARTMENT OF OCEAN DEVELOPMENT (KAPIL SIBAL)

(a) to (e): A Statement is laid on the Table of the Lok Sabha.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF LOK SABHA STARRED QUESTION NO. 454 TO BE ANSWERED ON 23rd DECEMBER 2005

Yes Sir. The Coastal Ocean Monitoring and Prediction System (COMAPS) was launched during the year 1989-1990 to collect data on the levels of Marine Pollutants in the coastal waters of the country.

The main objective of the programme is to analyse the trend of decrease/increase of pollutants in the coastal waters off major cities, towns and other locations of industrial importance. Collection of data on 25 pollution and other related parameters (such as Biochemical Oxygen Demand, pathogenic bacteria, toxic metals like cadmium, mercury and lead in sediments) at 81 locations was carried out.

(c) The year-wise details of funds allocated/expenses incurred on the COMAPS since its launching are given below:

(Amount in Rupees)

Sl.No.	Year	Fund allocated	Expenditure incurred
1.	1989-90	50,00,000	36,33,000
2.	1990-91	50,00,000	61,77,000
3.	1991-92	1,00,00,000	1,04,99,000
4.	1992-93	1,00,00,000	1,57,40,000
5.	1993-94	1,20,00,000	1,31,95,000

6.	1994-95	1,20,00,000	1,78,78,000
7	1995-96	2,00,00,000	1,99,38,000
8.	1996-97	2,00,00,000	1,60,79,000
9.	1997-98	2,00,00,000	1,98,64,000
10.	1998-99	1,50,00,000	1,49,81,000
11.	1999-2000	1,50,00,000	1,62,00,000
12.	2000-01	2,05,00,000	2,25,00,000
13.	2001-02	4,05,00,000	2,15,00,000
14.	2002-03	2,00,00,000	1,92,22,000
15.	2003-04	2,00,00,000	1,75,00,000
16.	2004-05	2,00,00,000	1,99,98,970
17.	2005-06#	2,50,00,000	78,70,477

#Expenditure status as on 15 December, 2005

(d)As a result of the systematic monitoring of the coastal areas, health of our seas could be assessed and areas of low, medium and high concentrations of pollutants could be identified. The areas of high concentration of pollutants are being monitored intensively. Details of these locations are:

i) Areas of clean sea water quality:

The sea approx. beyond 1 Km along the coastline of India except off Mumbai is clean and conforms to quality of clean waters. In Mumbai, the sea off 5 Km is clean. This is primarily due to the fact that the levels of dissolved oxygen and other parameters fulfilling the requirements of clean seawater.

ii) Areas of no concern:

In Vadinar and Kandla of Gujarat, Ratnagiri in Maharashtra, Mandovi and Zuari in Goa, Mangalore Port in Karnataka, Cannanore and Calicut in Kerala, Cuddalore in Tamil Nadu and the West Bengal coast, the concentrations of dissolved oxygen was fairly good and other toxic elements like ammonia, heavy metals in sediments and biota were slightly higher (about 15%) than the clean waters.

iii) Areas that need intensive monitoring:

In Porbandar, Damanganga estuary, and Vapi industrial estate in Gujarat, Mangalore coast in Karnataka, Kochi backwaters, Quilon, Paravur in Kerala and Tuticorin and Arumuganeri in Tamil Nadu, Puri in Orissa the levels of dissolved oxygen were moderate to normal and however some of the elements like ammonia, pathogenic bacteria in sea water and heavy metals in sediments showed higher concentration (about 25%) than the normal values. Due to the definite source of pollutants and chances of increase in concentration are likely to be high, these areas need intensive monitoring.

iv) Areas of concern:

In Veraval Port in Gujarat, Versova Creek, Mahim Bay and Thane Creek in Maharashtra, Veli in Kerala, Visakhapatnam Harbour and Kakinada Bay (canal) in Andhra Pradesh, the concentrations of dissolved oxygen were nil to low during low tide period and improved their levels only moderately (30-50%) during the high tide period. Further, the levels of toxic metals like cadmium and lead were high in sediments in some locations (like Thane creek) and pH was very low (Veli). If no control measures are exercised now, the areas will become regions of high concentrations of pollution in another 5 to 6 years.

Levels of organochlorine pesticides like Hexachloro-cyclo-hexane (HCH) and Dichloro-diphenyl-trichloroethane (DDT) were analysed in 32 species of marine fish collected at various locations along the east coast of India. The levels of both the chemicals were very much lower than those observed in the terrestrial animals and other food items. These levels are very well below the limits (5 parts/billion is the safety limit) set by the Health authorities. This would indicate that the marine fish is not contaminated with the pesticide residues in the locations from which the samples were collected,

(e) Benefits on data collected from the COMAPS programme:

The data collected have formed as a baseline data, which is very useful in conducting Environmental Impact Assessments studies for industrial and port projects to derive the impact of water quality in the proposed projects in future.

#Active interaction with State Pollution Control Boards, especially bringing the levels of pollution in highly polluted areas such as Mumbai, Veraval Port, Veli and Puri, has promoted establishment of appropriate treatment plants in Mumbai and Puri which has improved the seawater quality of Puri and the same is likely to be achieved in near future in Mumbai.

#The data on pollution levels have helped the Pollution Control Boards to plan for type of industries/industrial estates that can be located in an area in future.

#The programme has brought out the present status of levels of pollution in the coastal areas of the country especially by identifying areas of clean sea water quality from the coast to the offshore. Such an information is useful to the fisheries and salt pan industries. This helps in promoting mariculture, as a resource augmentation technique to improve the livelihood of the coastal communities.